**Deep Learning**

* Install the following packages through Anaconda Navigator.
  + Tensorflow
  + Genism
* Make sure all the python files provided are in the same python (spyder) root directory.
  + Data\_helper.py
  + Text\_cnn\_rnn.py
  + Train.py
  + Predict.py
  + Training\_config.json
* Convert a CSV file to Zip file and add extension .CSV to the compressed file.
* Open data\_helper.py file and provide the path location of the above zip file at the end of the python code in the main function.
* Open train.py file and provide the name of the CSV file above at input file in the train\_cnn\_rnn function definition as shown below.
  + input\_file = ‘filename.csv.zip’
* Now run all the files in the below order.
  + Data\_helper.py
  + Text\_cnn\_rnn.py
  + Train.py
* You can see the results in the console.
* Intermediate files including model checkpoints, trained results are saved directly into the python root directory.
* If you have new test data and want to see how the model is predicting, open predict.py then change the trained\_dir and test\_file paths in the predict\_unseen\_data function definition.
  + Trained\_dir is the intermediate file(trained\_results\_153XXXX) created in the python root directory during training the model. Give the path of this folder to trained\_dir.
  + Test\_file is the new data file that needs to be predicted
    - trained\_dir=r'C:/Users/python /trained\_results\_1534354840/'
    - test\_file = 'sampling1.csv'
* predicted\_results file will be generated when you run the file predict.py in the python root directory.